Q. From Laura Hisam:

Promoting public awareness of stormwater quality protection should have been made a priority years ago. Suggest utilizing the following tools:

- 1. Brochures/fact sheets/social media for general public and specific audiences such as: homeowner and condo associations, apt. complexes, shopping centers, private and public schools, churches, parks/public places, etc.
- 2. Recreational guides to educate groups such as golfers, hikers, paddlers, climbers, fisherman, and campers;
- 3. Alternative information sources, such as web sites,, bumper stickers, refrigerator magnets, posters for bus and subway stops, and restaurant placemats;
- 4. A library of educational materials for community and school groups;
- 5. Volunteer citizen educators to staff a public education task force;
- 6. Event participation with educational displays at home shows and community festivals;
- 7. Educational programs for school-age children;
- 8. Storm drain stenciling of storm drain inlets with messages such as "Do Not Dump Drains Directly to Lake";
- 9. Storm water hotlines for information and for citizen reporting of polluters:
- 10. Economic incentives to citizens and businesses (e.g., rebates to homeowners purchasing mulching lawnmowers or biodegradable lawn products); and
- 11. Tributary signage to increase public awareness of local water resources.
- 12. Improved/more frequent hazardous waste pick-up and/or drop-off availability with incentives.

A. There are many good ideas/methods provided. However, Loudoun County's program is constrained by budget and staffing. Currently, Loudoun County does brochures, event participation, storm drain marking, a storm water hotline, and household hazardous waste drop offs. The county may delve into the other mentioned areas if they are perceived as effective outreach methods. This is a good subject for the Citizen's Stormwater Education Committee described in Section 5.4.2 of the Plan.

Q. From Phil Daley—Loudoun Watershed Watch

OK I read the entire 'program' and it looked pretty good. BUT NO TEETH!!!-yes you evaluate how many you reach, and what feedback you get from some-but do they REALLY comply/implement what you are preaching?? That is the tough part to crack, especially in a county where most folks only think of themselves-not the impact that they, when combined with others, has in total. 'A little here or there won't hurt anything, so I won't worry about dumping my stuff, it isn't much'. Also where are the Loudoun Environmental Stewardship Alliance and Loudoun Clean Stream Association Coalition when you have family stream day?? I have never heard of them-who are they? Great names-hope they do great work!!

A. The purpose of the outreach effort is to educate target audiences about reducing stormwater pollution—not to ensure compliance. If the proposed methods are deemed ineffective, then the

Citizen's Stormwater Education Committee (Section 5.3.2 of the Plan) can recommend changes in efforts to improve the program's performance.

Q. From Bonnie L. Mattingly—Goose Creek Association, Co-Chair

- 1. Increased storm water runoff This results in massive soil erosion leading to excessive sediment pollution in which the benthic and overall aquatic community in the Goose Creek watershed in both Fauquier and Loudoun Counties is decimated. There are more and bigger storms and the erosion in our streams is increasing. This can be seen by the benthic scores on the stream monitoring report card of the Goose Creek Association.
- 2. Nutrient (nitrogen and phosphorous) There must be acknowledgement of the regulatory impacts which will be ever increasingly imposed through the Chesapeake Bay TMDL over the next decade which could be as high as hundreds of millions of dollars.
- 3. Water supply Sustainable water supply in Loudoun County could be in jeopardy with multi-year drought. Current belief there is abundant aquifer water flowing is not factual. Severe drought conditions would require emergency water supply for areas devastated by lack of rain. Before the wells go dry, the creeks completely stop flowing endangering the entire riparian ecosystem. In eastern Loudoun, the Luck Stone quarries storing billions of gallons of emergency water will not be the high quality of the water from the Potomac River from which it has previously been tapped. Drought is an issue that has been noted as causal of many problems

A. The purpose of the public outreach plan is multi-fold: increasing target audience knowledge about the steps that can be taken to reduce stormwater pollution, increasing target audience knowledge of hazards associated with illegal discharges and improper disposal of waste, and implementing a diverse program with strategies that are targeted toward audiences most likely to have a significant stormwater impact. The Goose Creek benthic impairment will be addressed in the Goose Creek TMDL Action Plan that will be developed during the next twelve months. Nitrogen is being addressed in this Plan. Overall water supply is a land development issue and not part of the MS4 program.

Q. From David Ward

The plan is too highly focused on Loudoun County activities and the formation of yet another Committee. The Plan fails to acknowledge the existing resources and activities already in place both by other agencies and non-governmental agencies. The Plan should better define how existing partnerships such as Loudoun Environmental Stewardship Alliance and Loudoun Watershed Watch can be leveraged and promoted. The Plan needs greater emphasis on existing programs in Loudoun Soil & Water Conservation District which distributes thousands of printed material to schools and makes routine watershed demonstration visits to the schools and has held dozens of rain barrel workshops. The Plan does not explain how the existing activities in County community centers and Parks and Rec programs can help deliver the message. The Plan does not provide detail on promoting various programs such as Audubon Naturalist, summer "environmental" camps, Blue Ridge Environmental Center and many others. The Plan is devoid of graphics and photographs to attract attention and be an effective "marketing" tool. The Plan should consider adopting a theme, tag line and logo as so many other government programs

have. The plan should consider developing a calendar of events such as http://www.bluewaterbaltimore.org/events/ and include activities other than just Loudoun County Government.

A. The Plan is a requirement of the MS4 Permit and must show efforts to be undertaken by Loudoun County. Nothing precludes cooperation or collaboration with others and discussions of such will likely be held by the Citizen's Stormwater Education Committee whose purpose is to address weaknesses or shortcomings in the program. Outreach material details will be developed over the next several months. Graphics, photos, theme, tag line, and logo are all items to be determined during that process.

Q. From David Ward

I do not agree with the following three issues identified in the plan as being high-priority water quality issues:

- 1. Bacteria
- 2. Swimming pool discharge
- 3. Nutrient (nitrogen and phosphorous)

The justification section in the Plan cites no data, cites no reports, ignores County-written Water Resource Monitoring Reports, ignore the 2006-2007 County-lead strategic watershed management planning efforts, ignores the 2008 County-contracted comprehensive watershed management plan which has over 90 recommendations, pays no acknowledgement to the BOS appointed Water Resources Technical Advisory Committee recommendation for over a decade to BOS, disregards the County-lead 2009 comprehensive stream assessment, makes no mention of Loudoun Watershed Watch State of The Streams Reports 2002 and 2005, neglects Goose Creek Association 2013 Report Card and does not mention the recreational use stream impairments developed by VA DEQ and approved by EPA.

I would recommend the following three issues:

- 1. Increased stormwater runoff and sediment This results in significant soil and bank erosion leading to excessive sediment pollution in which the benthic and overall aquatic community in Loudoun County is decimated. The County reports show this time and time again, not to mention state and federal reports. The increased flashiness of the streams from urbanization and inadequate stormwater controls do little to compensate for the ever increasing imperviousness.
- 2. Nutrient (nitrogen and phosphorous) The PEOP correctly cites EPA, but fails to acknowledge the regulatory impacts which will be ever increasingly imposed through the Chesapeake Bay TMDL over the next decade as a price tag in the hundreds of millions of dollars!
- 3. Water supply Loudoun County uses both surface water supplies mostly in eastern Loudoun and groundwater supplies in western Loudoun. A multi-year drought would devastate both supplies. While water supply is a quantity issue, with an inadequate supply the water quality will be adversely affected.

I do not believe that swimming pool discharge is a significant issue and is illegal per regulation.

A. The Public Education Outreach Plan is meant to address stormwater pollution from the urbanized area in eastern Loudoun County. It is not intended as a program to address issues beyond the MS4 Permit area. The studies and planning efforts cited in the question address primarily other areas of the County or pollution sources other than urban stormwater. Impairments in the urban streams are generally due to sediment or bacteria. Chesapeake Bay impairments are due to sediment and nutrients. This Plan addresses bacteria and nutrients. Sediment is addressed through the County's Erosion & Sediment Control program and the stormwater system maintenance program. Swimming pool discharge is being targeted because excess chlorine is hazardous to all biological life and, until relatively recently, swimming pool discharges were directed to go to the storm drain system. De-chlorinated swimming pool discharges are legal and safe.